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REMARKS

A Petition and Fee for One Month Extension of Time is submitted herewith.

An Excess Claim Fee Payment Letter is submitted herewith to cover the cost of the added claims.

Entry of this Amendment is proper because it narrows the issues on appeal and does not require further search by the Examiner.

Claims 1-70 are all the claims presently pending in the application. Claims 1, 5-6, 14, 20, 22-25, 28-31, 33, 36-39, 43-44, 52, and 58-66 have been amended to more particularly define the invention. Claims 67-70 have been added to claim additional features of the claimed invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant gratefully acknowledges that claims 14, 33 and 51 would be allowable if rewritten in independent form. However, Applicant submits that all of the claims are allowable and, therefore, respectfully declines to rewrite these claims in independent form.

Claims 1-13, 15-32, 34-50 and 52-66 are rejected under 35 U.S.C. § 102(e) as being anticipated by Li (U.S. Patent No. 5,920,859). Claims 1-13, 15-32, 34-50 and 52-66 are rejected under 35 U.S.C. § 102(e) as being anticipated by Page (U.S. Patent No. 6,285,999). Claims 1-13, 15-32, 34-50 and 52-66 are rejected under 35 U.S.C. § 102(e) as being anticipated by Brown (U.S. Patent No. 5,875,446).

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

The claimed invention (as recited, for example, in claim 1) is directed to a computer program product, for use with a computer system, for directing the computer system to execute a search of information resources, the resources having content-based links between each other, to identify a desired subset of the information resources which satisfy a desired

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criterion.

In this exemplary embodiment, the computer program product includes a computer-readable medium, means, provided on the recording medium, for directing the computer system to identify an initial set of information resources, means, provided on the recording medium, for directing the computer system to define initial authoritativeness information for the initial set, means, provided on the recording medium, for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to produce at least one set of authoritativeness information based on links related to resources of the input set, and means, provided on the recording medium, for directing the computer system to produce a final set of information resources based on the at least one set of authoritativeness information.

Importantly, in this exemplary embodiment, the initial set of information resources is identified based on a keyword-based query.

Conventional computer systems may obtain a plurality of documents including linked documents and linking documents, the linked document being pointed to by a link in the linking document. However, such conventional methods do not identify an initial set of information resources based on a keyword-based query.

The claimed invention, on the other hand, identifies an initial set of information resources based on a keyword-based query. The claimed invention may use initial authoritativeness information to produce at least one set of authoritativeness information based on links related to resources of the input set. Thus, the claimed invention is much more versatile than conventional systems.

II. THE PRIOR ART REFERENCES

A. The Li Reference

The Examiner alleges that Li teaches the claimed invention as recited in claims 1-13, 15-32, 34-50 and 52-66. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Li.

Li discloses a search engine for retrieving documents pertinent to a query. The Li search engine indexes documents with terms in the hyperlink pointing to that document (Li at

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col. 3, lines 47-54).

However, contrary to the Examiner's allegations, Li does not teach or suggest "*means, provided on the recording medium, for directing the computer system to identify an initial set of information resources based on a keyword-based query*" as recited for example, in claim 1. As noted above, unlike conventional computer systems, the claimed invention identifies an initial set of information resources based on a keyword-based query (Application at Abstract; col. 4, lines 34-42; col. 21-23; Figure 1). Based on links related to resources of this input set, the claimed invention produces at least one set of authoritativeness information (Application at col. 7, line 32-col. 8, line 42). This allows the claimed invention to be much more versatile than conventional systems.

Clearly, Li does not teach or suggest the novel features of the claimed invention. Li may disclose inputting a "query" (Li at Figure 6). However, Li does not specify the type of query to be input. For example, Li merely states that "[a] user from outside the system 30 inputs a query 32 through a user interface 34" (Li at col. 5, lines 17-19).

The Examiner attempts to rely on Figure 6 to support his allegations. However, Figure 6 merely discloses step 120 which is identified as "Input user query".

Applicant respectfully submits that merely reciting the term "query" does not disclose a "keyword-based" query. Indeed, not all queries are "keyword-based". Indeed, the query may be an image query, or a video query, etc. For example, for an image query, the parameters for an image may be input and the system may return images matching the input parameters (e.g., query parameters).

Moreover, even assuming arguendo that Li discloses a keyword-based query, Li certainly does not disclose identifying an initial set of information resources based on the keyword-based query. Instead, Li merely discloses finding documents related to a query, finding document link vectors and calculating a relevance score (Li at Figure 6).

Clearly, this is completely unrelated to the claimed invention. Therefore, Li clearly does not teach or suggest the features of the claimed invention which identifies an initial set of information resources based on a keyword-based query.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggest by Li. Therefore, the Examiner is respectfully requested to withdraw

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this rejection.

B. The Page Reference

The Examiner alleges that Page teaches the claimed invention as recited in claims 1-13, 15-32, 34-50 and 52-66. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Page.

Page discloses a method for ranking nodes in a linked database. Specifically, in the Page method, for a plurality of linked and linking documents (the linked documents being pointed to by a link in the linking documents) a linked document is assigned a score based on the scores of the linking documents (Page at col. 8, lines 55-66).

However, contrary to the Examiner's allegations, Page does not teach or suggest *"means, provided on the recording medium, for directing the computer system to identify an initial set of information resources based on a keyword-based query"* as recited for example, in claim 1. As noted above, the claimed invention identifies an initial set of information resources based on a keyword-based query (Application at Abstract; col. 4, lines 34-42; col. 21-23; Figure 1). This feature allows the claimed invention to be much more versatile than conventional systems.

Clearly, Page does not teach or suggest the novel features of the claimed invention. Indeed, Page may disclose "obtaining a plurality of documents" (Page at col. 8, line 57). However, nowhere does Page disclose how those documents may be obtained.

The Examiner attempts to rely on Figure 3, col. 4, lines 5-49, col. 6, lines 11-55, col. 7, lines 23-5, and col. 8, lines 10-41 to support his position. However, neither the figure nor any of these passages disclose identifying an initial set of information resources based on a keyword-based query.

For example, Figure 3 merely shows a flowchart in which step 101 includes "SELECT AN INITIAL N-DIMENSIONAL VECTOR p_0 ". However, nowhere does the Figure explain how the vector may be selected. Further, the passage at col. 4, lines 5-49 merely discusses documents A, B and C. However, nowhere does the passage discuss how these documents are obtained. Further, columns 6-8, like col. 4 merely discuss Documents A, B and C, but do not discuss their origin.

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Indeed, this is an important difference between the claimed invention and the Page system. For example, as noted above, based on links related to resources of this input set, the claimed invention produces at least one set of authoritativeness information (Application at col. 7, line 32-col. 8, line 42). Thus, in the claimed invention, the keyword-based query may have an influence on the authoritativeness information produced. This is clearly not taught or suggested by the Page system.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggest by Page. Therefore, the Examiner is respectfully requested to withdraw this rejection.

C. The Brown Reference

The Examiner alleges that Brown teaches the claimed invention as recited in claims 1-13, 15-32, 34-50 and 52-66. Applicant submits, however, that there are elements of the claimed invention which are neither taught nor suggested by Brown.

Brown discloses a system for identifying and hierarchically grouping one or more objects that are topically relevant to a user query and/or have a structural relation to one another (Brown at Abstract).

However, contrary to the Examiner's allegations, Brown does not teach or suggest *"means, provided on the recording medium, for directing the computer system to identify an initial set of information resources based on a keyword-based query"* as recited for example, in claim 1. As noted above, this feature allows the claimed invention to be much more versatile than conventional systems.

Clearly, Brown does not teach or suggest the novel features of the claimed invention. Indeed, Brown may disclose inputting a "query" (e.g., see Brown at Figure 10, step 605). However, like Li, Brown does not indicate what type of query is to be input.

As noted above, there are many different types of queries. Thus, merely reciting a "query" does not teach or suggest a "keyword-based" query which is a specific type of query.

Moreover, even arguing that Brown discloses a keyword-based query, Brown certainly does not disclose identifying an initial set of information resources based on the keyword-based query. Instead, as illustrated in Figure 10, Brown teaches to input a query

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605, input a set of objects 610, then rank the objects 615. This is completely unrelated to the claimed invention.

Therefore, Applicant submits that there are elements of the claimed invention that are not taught or suggest by Brown. Therefore, the Examiner is respectfully requested to withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

The Examiner alleges that the Declaration is defective. However, Applicant states that the original patent will be promptly forwarded to the Examiner upon receiving a Notice of Allowance in this case.

In addition, submitted herewith is a Notice of Consent to Reissue Application stating that IBM is the assignee of the entire interest of this Application and consents to the reissue application, in compliance with Rule 1.172.

In view of the foregoing, Applicant submits that claims 1-70, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: 7/21/03


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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment was filed by facsimile with the United States Patent and Trademark Office, Examiner Charles Rones, Group Art Unit #2175 at fax number (703) 746-7238 this 21st day of July, 2003.



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